ROY COOPER Governor

MICHAEL S. REGAN Secretary

MICHAEL ABRACZINSKAS



DRAFT – September 9, 2020

Mr. Tim Glenn President Kleen Tech. Inc. P. O. Box 1369 Hickory, North Carolina 28603

Dear Mr. Glenn:

SUBJECT: Air Quality Permit No. 10647R00

> Facility ID: 1200205 Kleen Tech, Inc.

Valdese, North Carolina

Burke County Fee Class: Title V **PSD Class: Minor**

In accordance with your complete Air Permit Application for a Greenfield Facility Title V permit received on January 10, 2020, we are forwarding herewith Air Quality Permit No. 10647R00 to Kleen Tech, Inc., 690 Lovelady Road, Valdese, North Carolina authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02O .0102 have been listed for informational purposes as an "ATTACHMENT."

As the designated responsible official, it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to North Carolina General Statutes (NCGS) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.



Mr. Glenn XXXX, 2020 Page 2

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that the Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215.108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of NCGS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

Burke County has not triggered increment tracking under PSD for any pollutant (PM_{10} , $PM_{2.5}$, SO_2 , or NOx (as NO_2)), so no tracking of emissions is required.

This Air Quality Permit shall be effective from XXXX, 2020 until XXXX, 2028, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein. Should you have any questions concerning this matter, please contact Judy Lee at 919-707-8729 or judy.lee@ncdenr.gov.

Sincerely yours,

William D. Willets, P.E., Chief, Permitting Section Division of Air Quality, NCDEQ

c: Asheville Regional OfficeCentral FilesConnie Horne (cover letter only)

ATTACHMENT

Table of Insignificant Activities

Insignificant Activities per 15A NCAC 02Q .0102:

Emission Source ID No.	Emission Source Description
N/A	N/A

- 1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the Permittee is exempted from demonstrating compliance with any applicable requirement.
- 2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 "Control of Toxic Air Pollutants" or 02Q .0711 "Emission Rates Requiring a Permit."
- 3. For additional information regarding the applicability of MACT or GACT see the DAQ page titled "Specific Permit Conditions Regulatory Guide." The link to this site is as follows: http://deq.nc.gov/about/divisions/air-quality/air-quality-permits/specific-permit-conditions-regulatory-guide.

ATTACHMENT

Table of Changes

The following table summarizes changes to the Kleen Tech, Valdese, NC, Air Permit No. (No previous permit):

Page No(s).	Section	Description of Changes
N/A	N/A	Greenfield facility so everything is new.

All sources and/or control devices will be entered in the Emission Source Module (ESM) under this permit modification.



State of North Carolina Department of Environmental Quality Division of Air Quality

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
10647R00	N/A	XXXX, 2020	XXXX, 2028

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee: Kleen Tech, Inc.

Facility ID: 1200205

Facility Site Location: 690 Lovelady Road

City, County, State, Zip: Valdese, Burke County, NC, 28690

Mailing Address: P. O. Box 1369

City, State, Zip: Hickory, NC, 28603

Application Number: 1200205.20A Complete Application Date: May 28, 2020

Primary SIC Code: 7218

Division of Air Quality: Asheville Regional Office

Regional Office Address: 2090 US Highway 70

Swannanoa, North Carolina 28778

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SECTION 3: GENERAL PERMIT CONDITIONS

SECTION 1 – PERMITTED EMISSION SOURCE (S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE (S) AND APPURTENANCES

The following table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances:

Page Number(s)	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
4 – 13	ES-001A.1 through ES-001A.4	Four (4) wet (non-solvent) washing machines (400 lb maximum capacity)	N/A	N/A
4 – 13	ES-001B.1 and ES-001B.2	Two (2) wet (non-solvent) washing machines (500 lb maximum capacity)	N/A	N/A
4 – 13	ES-001C	One (1) wet (non-solvent) washing machines (30 lb maximum capacity)	N/A	N/A
4 – 13	ES-001D	One (1) wet (non-solvent) washing machines (70 lb maximum capacity)	N/A	N/A
4 – 13	ES-002A.1 and ES-002A.2	Two (2) natural gas-fired dryers (2.7 million Btu per hour maximum firing rate; 800 lb dry weight maximum capacity; direct-fired)	N/A	N/A
4 – 13	ES-002B.1 and ES-002B.2	Two (2) natural gas-fired dryers (2.75 million Btu per hour maximum firing rate; 400 lb dry weight maximum capacity; direct-fired)	N/A	N/A
4 – 13	ES-002C	One (1) steam heated dryer (70 lb dry weight maximum capacity)	N/A	N/A
4 – 13	ES-002D	One (1) steam heated dryer (100 lb dry weight maximum capacity)	N/A	N/A
4 – 13	ES-003	One (1) wastewater treatment plant (200 gallon per minute maximum capacity)	N/A	N/A
4 – 13	ES-Boiler1	One (1) natural gas-fired boiler (8.0 million Btu per hour maximum heat input)	N/A	N/A

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

2.1 Emission Source(s) and Control Devices(s) Specific Limitations and Conditions

The emission source(s) and associated air pollution control device(s) and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

A. Industrial Laundering Operations consisting of:

- Eight Industrial washing machines (ID Nos. ES-001A through ES-001D),
- Four Natural gas-fired dryers (ID Nos. ES-002A through ES-002B),
- Two Steam heated dryers (ID Nos. ES-002C and ES-002D),
- One Wastewater treatment plant (No. ES-003), and
- One Natural gas-fired boiler (ID No. ES-Boiler1)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	0.635 pounds particulate per million Btu heat input (ID No. ES-Boiler1)	15A NCAC 02D .0503
Particulate matter	E = 4.10(P) ^{0.67} for process rates less than or equal to 30 tons per hour E = 55.0 x P ^{0.11} - 40 for process rates greater than 30 tons per hour Where, E = allowable emission rate in pounds per hour P = process weight in tons per hour (ID Nos. ES-001A through ES-001D, ES-002A through ES-002D, and ES-003)	15A NCAC 02D .0515
Sulfur dioxide	2.3 pounds per million Btu (ID Nos. ES-002A through ES-002B and ES-Boiler1)	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Odorous emissions	State-enforceable only – See Section 2.2 A.5.	15A NCAC 02D .1806
Volatile organic compounds	Facility-wide less than 250 tons per year – See Section 2.2 A.1.	15A NCAC 02Q .0317 PSD Avoidance for 15 NCAC 02D .0530
Hazardous air pollutants	Facility-wide HAP emission limits – See Section 2.2 A.2.	15A NCAC 02Q .0317 for avoidance of 15A NCAC 02D .1112(G)
Toxic air	State-enforceable only – See Section 2.2 A.3.	15A NCAC 02Q .0711
pollutants	State-enforceable only – See Section 2.2 A.4.	15A NCAC 02D .1100
Fugitive dust	State-enforceable only - See Section 2.2 A.6.	15A NCAC 02D .0540

1. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

a. Emissions of particulate matter from the combustion of natural gas that are discharged from this source (**ID Nos. ES-Boiler1**) into the atmosphere shall not exceed **0.635** pounds per million Btu heat input.

Testing [15A NCAC 02Q .0308(a)]

b. If emissions testing is required, the testing shall be performed in accordance General Condition 17.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0308(a) and 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas in this source (**ID Nos. ES-Boiler1**).

2. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from these sources (ID Nos. ES-001A through ES-001D, ES-002A through ES-002D, and ES-003) shall not exceed an allowable emission rate as calculated by the following equations:

 $E = 4.10 \text{ x P}^{0.67}$ (for process rates less than or equal to 30 tons per hour), or $E = 55.0 \text{ x P}^{0.11}$ - 40 (for process rates greater than 30 tons per hour) Where, E = allowable emission rate in pounds per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0308(a)]

P = process weight in tons per hour

- b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition 17.
- c. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limit(s) above by testing these sources (**ID Nos. ES-002A through ES-002D**) for particulate emissions in accordance with a testing protocol approved by the DAQ. Details of the emissions testing and reporting requirements can be found in General Condition 17.
 - i. Testing shall be completed and the results submitted within 180 days of permit issuance [XXXX, 2020], unless an alternate date is approved by DAQ.
 - ii. Operating parameters or emission factors as specified in this permit do not apply during performance tests or emissions tests conducted in an attempt to establish new operating parameters or emission factors.
- d. The source shall be responsible for ensuring, within the limits of practicality, that the equipment or process being tested is operated at or near its maximum normal production rate, or at a lesser rate if specified by the Director or his delegate.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0308(a) and 02Q .0508(f)]

- e. The Permittee shall maintain production records such that the process rates "P" in tons per hour, as specified by the formulas contained above can be derived, and shall make these records available to a DAQ authorized representative upon request.
- f. No reporting is required for particulate emissions from these sources (ID Nos. ES-001A through ES-001D, ES-002A through ES-002D and ES-003).

3. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from these sources (**ID Nos. ES-002A through ES-002B and ES-Boiler1**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02O .0308(a)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition 17.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0304(a) and 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of natural gas in these sources (ID Nos. ES-002A through ES-002B and ES-Boiler1).

4. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these sources (ID Nos. ES-001A through ES-001D, ES-002A through ES-002D, ES-003 and ES-Boiler1) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0308(a)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition 17.

Monitoring [15A NCAC 02Q .0308(a)]

- c. To ensure compliance, once a month the Permittee shall observe the emission points of these sources (ID Nos. ES-001A through ES-001D, ES-002A through ES-002D, ES-003 and ES-Boiler1) for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. The Permittee shall establish "normal" for these sources in the first 30 days following the effective date of the permit. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
 - take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 A.4.a above.

Recordkeeping [15A NCAC 02Q .0308(a)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. the results of any corrective actions performed.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Sections 2.1 A.4.c. and d. above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2.2 Multiple Emission Source(s) Specific Limitations and Conditions

A. Facility-wide – All emission sources

The following table provides a summary of limits and standards for the emission sources:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Volatile organic compounds	Facility-wide: Less than 248 tons per consecutive 12-month period	15A NCAC 02Q .0317 PSD Avoidance for 15 NCAC 02D .0530
Hazardous Air Pollutants	Facility-wide: Less than 9.9 tons for single a HAP per 12-month period Less than 24.8 tons for combined HAPs per 12-month period	15A NCAC 02Q .0317 for avoidance of 15A NCAC 02D .1112 112G Case-by-Case MACT
Toxic air pollutants	Facility-wide: Emissions limits for toxic air pollutant emission rates	State Enforceable Only 15A NCAC 02Q .0711
Toxic air pollutants	Facility-wide: Modeled emission rates	State Enforceable Only 15A NCAC 02D .1100
Odorous emissions	Facility-wide: Odorous emissions must be controlled	State-enforceable only 15A NCAC 02D .1806
Fugitive dust	Facility-wide: Minimize fugitive dust beyond property boundary	State Enforceable Only 15A NCAC 02D .0540
N/A	EMISSIONS REPORTING – Submit annual emissions inventory report by June 30 of each year	15A NCAC 02Q .0207
N/A	Renewal Application – 90 days prior to the expiration date of this permit, submit Title V permit renewal application	15A NCAC 02Q .0304
N/A	Submit Title V permit application within one year following the effective date of the permit	15A NCAC 02Q .0504
N/A	Reporting of excess emissions	15A NCAC 02D .0535

1. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for Avoidance of 15A NCAC 02D. 0530 PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of this regulation, 15A NCAC 02D .0530(g), the facility-wide emission sources shall discharge into the atmosphere less than 248 tons of VOCs per consecutive 12-month period.

Testing [15A NCAC 02Q .0308(a)]

- b. If emission testing is required, the Permittee shall perform such testing in accordance with General Condition 17.
- c. Under the provisions of NCGS 143-215.108, the Permittee shall conduct a performance test to establish the appropriate VOC mass emission rates from all affected sources (ID Nos. ES-001A through ES-001D, ES-002A through ES-002D and ES-003) in accordance with a testing protocol approved by the DAO.
 - i. Testing of the industrial laundering process shall be completed and the results submitted within 180 days of permit issuance [XXXX, 2020], unless an alternate date is approved by DAQ.
 - ii. Operating parameters or emission factors as specified in this permit do not apply during performance tests or emissions tests conducted in an attempt to establish new operating parameters or emission factors.

d. The source shall be responsible for ensuring, within the limits of practicality, that the equipment or process being tested is operated at or near its maximum normal production rate, or at a lesser rate if specified by the Director or his delegate.

Production/Operational Limits [15A NCAC 02Q .0308(a)]

- e. To ensure compliance with the avoidance limit above, the following production/operational limits shall apply:
 - i. The Permittee shall not operate more than 6,552 hours per consecutive 12-month period.
 - ii. The total weight of all soiled products processed shall not exceed 19,200 pounds per day.
 - iii. The total annual weight of all soiled products (i.e., print, furniture and shop towels combined) processed shall not exceed <u>5,990,400 pounds</u> per consecutive 12-month period.

Monitoring/Recordkeeping Requirements [15A NCAC 02Q .0308(a)]

- f. Calculations of VOC emissions from all emission sources per month shall be made at the end of each month. The VOC emissions shall be calculated in a manner consistent with the calculation methodologies provided in the permit application (Application No. 1200205.20A). Emission factors used in the calculations for each source shall be appropriate for the soiled product that has been processed. All emission factors used shall be reviewed and approved by DAQ.
- g. Each calendar month, the Permittee shall calculate and record the VOC emissions for the previous month and the previous 12-month consecutive period to ensure compliance with Section 2.2 A.1.a. above. Monthly VOC emissions, in tons, from the industrial laundering operations shall be calculated as follows:
 - i. VOC emissions shall be determined from processing the soiled print/furniture towels and soiled shop towels, in tons, by the following equation and emission factors:

$$E = \frac{[(P \times EFp) + (S \times EFs)]}{month} * \frac{ton}{2,000 \ lb} = \frac{tons \ VOC}{month}$$

Where:

E = the total monthly VOC emissions from industrial laundering operations, in tons

P = the total weight of soiled print/furniture towels processed during the month by the facility, in 1,000 pounds

EFp = the emission factor for soiled print towels processed by the facility, in pounds of VOC per 1,000 pounds of soiled print/furniture towels

S = the total weight of soiled shop towels processed during the month by the facility, in 1,000 pounds

EFs = the emission factor for soiled shop towels processed by the facility, in pounds of VOC per 1,000 pounds of soiled print/furniture towels

Note: The Permittee assumes print and furniture towels are the same.

ii. VOC emission factors:

Type of Soiled Textile Laundered	VOC Emission Factors (lb/1,000 lb soiled)				
Print/Furniture Towels	Print Towel Washing	Print Towel Drying	Print Towel WWTP	Print Towel Total	
Towers	24.1	45.5	8.59	78.13	
Shop Towels	Shop Towel Washing	Shop Towel Drying	Shop Towel WWTP	Shop Towel Total	
•	5.5	6.15	5.32	16.97	

- h. The Permittee shall keep monthly records in a logbook (written or electronic format) of:
 - i. The monthly hours of operation of the laundering process, including WWTP;

- ii. The total weight in pounds of all soiled print and shop towels processed by the facility on a daily basis:
- iii. The monthly process rates and percent soiled product (i.e., print towels and shop towels).
- i. Calculations and the facility-wide VOC emissions shall be recorded monthly in a logbook (written or electronic format):
 - i. Consecutive 12-month rolling VOC emissions, in tons, shall be calculated by summing the monthly emissions as determined above, for the previous 12-month period to ensure compliance with Section 2.2 A.1.a. above.

The above records shall be recorded monthly in a logbook (written or electronic format), maintained on-site and made available to officials of the Division of Air Quality (DAQ), upon request. The Permittee must keep each entry in the log and all required records on file for a minimum of five years.

Reporting [15A NCAC 02Q .0508(f)]

- j. The Permittee shall submit a semiannual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities given in Sections 2.2 A.1.f. through 2.2 A.1.i. above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
 - i. The monthly hours of operation of the laundering process, including WWTP;
 - ii. The total weight in pounds of all soiled print and shop towels processed by the facility on a daily basis:
 - iii. The monthly process rates of each type of soiled product (i.e., print towels and shop towels);
 - iv. The monthly VOC emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months; and
 - v. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for Avoidance of 15A NCAC 02D .1112: 112(G) CASE BY CASE MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

- a. In order to remain classified a minor source for hazardous air pollutants and avoid applicability of this regulation, 15A NCAC 02D .1112, facility-wide emissions shall be less than the following limitations:
 - i. 24.8 tons per consecutive 12-month period of total, combined hazardous air pollutants; and
 - ii. 9.9 tons per consecutive 12-month period of any individual hazardous air pollutant.

Testing [15A NCAC 02Q .0308(a)]

- b. If emission testing is required, the Permittee shall perform such testing in accordance with General Condition 17.
- c. Under the provisions of NCGS 143-215.108, the Permittee shall conduct a performance test to establish the appropriate HAP mass emission rates from all affected sources (ID Nos. ES-001A through ES-001D, ES-002A through ES-002D and ES-003) in accordance with a testing protocol approved by the DAO.
 - i. Testing of the industrial laundering process shall be completed and the results submitted within 180 days of permit issuance [XXXX, 2020], unless an alternate date is approved by DAQ.
 - Operating parameters or emission factors as specified in this permit do not apply during performance tests or emissions tests conducted in an attempt to establish new operating parameters or emission factors.
- d. The source shall be responsible for ensuring, within the limits of practicality, that the equipment or process being tested is operated at or near its maximum normal production rate, or at a lesser rate if specified by the Director or his delegate.

Production/Operational Limits [15A NCAC 02Q .0308(a)]

e. To ensure compliance with the avoidance limit above, the production/operational limits in Section 2.2 A.1.e. above shall apply.

Monitoring/Recordkeeping/Reporting Requirements [15A NCAC 02Q .0308(a)]

- f. Monitoring, recordkeeping, and reporting shall be performed in accordance with Sections 2.2 A.1.f. through 2.2 A.1.j. above using the following HAP emission factors (as proposed with Application No. 1200205.20A):
 - i. Emission factors used in the calculations for each source shall be appropriate for the soiled product that has been processed. All emission factors used shall be reviewed and approved by DAQ.
 - ii. Total HAP emission factors:

Type of Soiled Textile Laundered	Total HAP Emission Factors (lb/1,000 lb soiled)					
Print/Furniture	Print Towel	Print Towel	Print Towel	Print Towel		
Towels	Washing	Drying	WWTP	Total		
	7.4	2.47	1.41	11.28		
	Shop Towel	Shop Towel	Shop Towel	Shop Towel		
Shop Towels	Washing	Drying	WWTP	Total		
	1.24	0.42	0.63	2.29		

iii. Toluene¹ emission factors:

Type of Soiled Textile Laundered	Toluene Emission Factors (lb/1,000 lb soiled)				
Print/Furniture	Print Towel Washing	Print Towel Drying	Print Towel WWTP	Print Towel Total	
Towels	4.04	0.81	0.745	5.59	
Shop Towels	Shop Towel Washing	Shop Towel Drying	Shop Towel WWTP	Shop Towel Total	
_	0.67	0.174	0.27	1.11	

iv. Other Individual HAP emission factors:

Type of Soiled Textile Laundered	Print/Furniture Towels					Shop To	owels	
D-11-44	EF (lb	s/1,000 lbs	soiled text	ile)	EF (lb	s/1,000 lbs	soiled text	ile)
Pollutant	Washing	Washing Drying WWTP Total			Washing	Drying	WWTP	Total
Ethylbenzene	0.49	0.198	0.093	0.78	0.031	0.022	0.03	0.083
Methyl isobutyl ketone	0.019	0.0044	0.0028	0.026	0.0021	0.00051	0.0011	0.004
Naphthalene	0.014	0.025	0.002	0.041	0.003	0.0024	0.0011	0.006
Perchloroethylene	0.066	0.0073	0.046	0.12	0.35	0.094	0.14	0.588
Styrene	0.011	0.0046	0.0016	0.017	0.0021	0.0012	0.0011	0.004
Trichloroethene	0.014	0.014 0.0058 0.002 0.022			0.0072	0.0027	0.006	0.016
Xylene	2.75	1.41	0.52	4.68	0.18	0.12	0.18	0.478

¹ Per the original application submittal received by RCO on January 15, 2020, Section 5.0 <u>Proposed Permit Limits</u>, the limiting production throughput factor is toluene.

State-enforceable only

3. 15A NCAC 02Q .0711: EMISSION RATES REQUIRING A PERMIT

- a. Pursuant to 15A NCAC 02Q .0711 "Emission Rates Requiring a Permit," for each of the below listed toxic air pollutants (TAPs), the Permittee has made a demonstration that facility-wide actual emissions do not exceed the Toxic Permit Emission Rates (TPERs) listed in 15A NCAC 02Q .0711. The facility shall be operated and maintained in such a manner that emissions of any listed TAPs from the facility, including fugitive emissions, will not exceed TPERs listed in 15A NCAC 02Q .0711.
- b. A permit to emit any of the below listed TAPs shall be required for this facility if actual emissions from all sources will become greater than the corresponding TPERs.
- c. <u>PRIOR</u> to exceeding any of these listed TPERs, the Permittee shall be responsible for obtaining a permit to emit TAPs and for demonstrating compliance with the requirements of 15A NCAC 02D.1100 "Control of Toxic Air Pollutants".
- d. In accordance with the approved application (Application No. 1200205.20A), the Permittee shall maintain records of operational information demonstrating that the TAP emissions do not exceed the TPERs as listed below:

	TPERs Limitations					
Pollutant (CAS Number)	Carcinogens (lb/yr)	Chronic Toxicants (lb/day)	Acute Systemic Toxicants (lb/hr)	Acute Irritants (lb/hr)		
n-Hexane (110-54-3)		23				
Methyl Ethyl Ketone (78-93-3)		78		22.4		
Methyl Isobutyl Ketone (108-10-1)		52		7.6		
Perchloroethylene (127-18-4)	13,000					
Styrene (100-42-5)			2.7			
Toluene (108-88-3)		98		14.4		
Trichloroethylene (79-01-6)	4,000					

State-enforceable only

4. 15A NCAC 02D .1100: CONTROL OF TOXIC AIR POLLUTANTS

a. Pursuant to 15A NCAC 02D .1100 and in accordance with the approved application (1200205.20A) for an air toxic compliance demonstration per AQAB Memorandum dated November 25, 2019, the following permit limits shall not be exceeded:

EMISSION SOURCE	TOXIC AIR POLLUTANT	EMISSION LIMIT(S) (lb/hr)
Main building, including washing machines and sorting (ID Nos. ES-001A through ES-001D)		1.43
Dryers (ID Nos. ES-002A through ES-002D)	Xylene (1330-20-7)	2.71
Wastewater treatment plant (ID No. ES-003)		0.51

b. For compliance purposes, within 30 days after each calendar year quarter as defined in 15A NCAC 02D .0602, the maximum emission rate of each TAP in pounds per hour for the sources and pollutants listed in Section 2.2 A.4.a. above shall be reported to the Regional Supervisor, DAQ.

State-enforceable only

5. 15A NCAC 02D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

a. The Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

State-enforceable only

6. 15A NCAC 02D .0540: PARTICULATES FROM FUGITIVE DUST EMISSION SOURCES

As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

7. 15A NCAC 02O .0207: ANNUAL EMISSIONS REPORTING

The Permittee shall report by **June 30** of each year the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by the responsible official of the facility.

8. 15A NCAC 02Q. 0304: APPLICATIONS

The Permittee, at least 90 days prior to the expiration date of this permit, shall request permit renewal by letter in accordance with 15A NCAC 02Q .0304(d) and (f). Pursuant to 15A NCAC 02Q .0203(i), no permit application fee is required for renewal of an existing air permit. The renewal request should be submitted to the Regional Supervisor, DAQ.

9. 15A NCAC 02Q .0504: OPTION FOR OBTAINING CONSTRUCTION AND OPERATION PERMIT

a. The Permittee shall file a Title V Air Quality Permit Application pursuant to 15A NCAC 02Q .0504. to modify the construction and operation permit on or before 12 months following the effective date of the permit [XXXX, 2020].

Reporting [15A NCAC 02Q .0504]

b. The Permittee shall notify the Regional Office in writing of the date of beginning operation of any of the new sources listed in this permit, postmarked no later than 30 days after such date.

10. 15A NCAC 02D .0535: EXCESS EMISSIONS REPORTING AND MALFUNCTION

As required by 15A NCAC 2D .0535, the Permittee of a source of excess emissions that last for more than four hours and that results from a malfunction, a breakdown of process or control equipment or any other abnormal conditions, shall:

- a. Notify the Director or his designee of any such occurrence by 9:00 a.m. Eastern time of the Division's next business day of becoming aware of the occurrence and describe:
 - i. the name and location of the facility,
 - ii. the nature and cause of the malfunction or breakdown,
 - iii. the time when the malfunction or breakdown is first observed,
 - iv. the expected duration, and
 - v. an estimated rate of emissions.
- b. Notify the Director or his designee immediately when the corrective measures have been accomplished.

This reporting requirement does not allow the operation of the facility in excess of Environmental Management Commission Regulations.

2.3 Permit Shield for Non-Applicable Requirements

The Permittee is shielded from the following non-applicable requirements [15A NCAC 02Q .0512(a)(1)(B)].

- A. 15A NCAC 02D .0524, 40 CFR Part 60 Subpart Dc, is not applicable to the natural gas-fired boiler (ID Nos. ES-Boiler1) because the boiler is less than 10 million Btu/hr. Pursuant to 40 CFR Part 60.40c(a) of the NSPS regulation, the affected facility to which this subpart applies has a maximum design heat input capacity of 100 million Btu/hr or less, but greater than or equal to 10 million Btu/hr and commenced construction, modification, or reconstruction after June 9, 1989.
- B. 15A NCAC 02D .1111, 40 CFR Part 63 Subpart JJJJJJ, is not applicable to the natural gas-fired boiler (**ID Nos. ES-Boiler1**) because the boiler is gas-fired pursuant to 40 CFR Part 63.11195(e).

SECTION 3 – GENERAL CONDITIONS

1. In accordance with G.S. 143-215.108(c)(1), <u>TWO COPIES OF ALL DOCUMENTS</u>, <u>REPORTS</u>, <u>TEST DATA</u>, <u>MONITORING DATA</u>, <u>NOTIFICATIONS</u>, <u>REQUESTS FOR RENEWAL</u>, <u>AND ANY OTHER INFORMATION REQUIRED BY THIS PERMIT shall be submitted to the:</u>

Regional Supervisor North Carolina Division of Air Quality Asheville Regional Office 2090 U. S. Highway 70 Swannanoa, NC 28778 828-296-4500

For identification purposes, each submittal should include the facility name as listed on the permit, the facility identification number, and the permit number.

- 2. <u>RECORDS RETENTION REQUIREMENT</u> In accordance with 15A NCAC 02D .0605, any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. These records must be kept on site for a minimum of 2 years, unless another time period is otherwise specified.
- 3. <u>ANNUAL FEE PAYMENT</u> Pursuant to 15A NCAC 02Q .0203(a), the Permittee shall pay the annual permit fee within 30 days of being billed by the DAQ. Failure to pay the fee in a timely manner will cause the DAQ to initiate action to revoke the permit.
- 4. <u>EQUIPMENT RELOCATION</u> In accordance with 15A NCAC 02Q .0301, a new air permit shall be obtained by the Permittee prior to establishing, building, erecting, using, or operating the emission sources or air cleaning equipment at a site or location not specified in this permit.
- REPORTING REQUIREMENT In accordance with 15A NCAC 02Q .0309, any of the following that
 would result in previously unpermitted, new, or increased emissions must be reported to the Regional
 Supervisor, DAQ:
 - a. changes in the information submitted in the application regarding facility emissions;
 - b. changes that modify equipment or processes of existing permitted facilities; or
 - c. changes in the quantity or quality of materials processed.

If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

- 6. In accordance with 15A NCAC 02Q .0309, this permit is subject to revocation or modification by the DAQ upon a determination that information contained in the application or presented in the support thereof is incorrect, conditions under which this permit was granted have changed, or violations of conditions contained in this permit have occurred. In accordance with G.S. 143-215.108(c)(1), the facility shall be properly operated and maintained at all times in a manner that will effectuate an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air cleaning device(s) and appurtenances.
- 7. In accordance with G.S. 143-215.108(c)(1), this permit is nontransferable by the Permittee. Future owners and operators must obtain a new air permit from the DAQ.

- 8. In accordance with G.S. 143-215.108(c)(1), this issuance of this permit in no way absolves the Permittee of liability for any potential civil penalties which may be assessed for violations of State law which have occurred prior to the effective date of this permit.
- 9. In accordance with G.S. 143-215.108(c)(1), this permit does not relieve the Permittee of the responsibility of complying with all applicable requirements of any Federal, State, or Local water quality or land quality control authority.
- 10. In accordance with 15A NCAC 02D .0605, reports on the operation and maintenance of the facility shall be submitted by the Permittee to the Regional Supervisor, DAQ at such intervals and in such form and detail as may be required by the DAQ. Information required in such reports may include, but is not limited to, process weight rates, firing rates, hours of operation, and preventive maintenance schedules.
- 11. A violation of any term or condition of this permit shall subject the Permittee to enforcement pursuant to G.S. 143-215.114A, 143-215.114B, and 143-215.114C, including assessment of civil and/or criminal penalties.
- 12. Pursuant to North Carolina General Statute 143-215.3(a)(2), no person shall refuse entry or access to any authorized representative of the DAQ who requests entry or access for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
- 13. In accordance with G.S. 143-215.108(c)(1), this permit does not relieve the Permittee of the responsibility of complying with any applicable Federal, State, or Local requirements governing the handling, disposal, or incineration of hazardous, solid, or medical wastes, including the Resource Conservation and Recovery Act (RCRA) administered by the Division of Waste Management.
- 14. <u>PERMIT RETENTION REQUIREMENT</u> In accordance with 15A NCAC 02Q .0110, the Permittee shall retain a current copy of the air permit at the site. The Permittee must make available to personnel of the DAQ, upon request, the current copy of the air permit for the site.
- 15. <u>CLEAN AIR ACT SECTION 112(r) REQUIREMENTS</u> Pursuant to 15A NCAC 02D .2100 "Risk Management Program," if the Permittee is required to develop and register a risk management plan pursuant to Section 112(r) of the Federal Clean Air Act, then the Permittee is required to register this plan with the USEPA in accordance with 40 CFR Part 68.
- 16. <u>PREVENTION OF ACCIDENTAL RELEASES GENERAL DUTY</u> Pursuant to Title I Part A Section 112(r)(1) of the Clean Air Act "Hazardous Air Pollutants Prevention of Accidental Releases Purpose and General Duty," although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release. **This condition is federally-enforceable only.**
- 17. GENERAL EMISSIONS TESTING AND REPORTING REQUIREMENTS If emissions testing is required by this permit, or the DAQ, or if the Permittee submits emissions testing to the DAQ in support of a permit application or to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow all DAQ procedures including protocol approval, regional

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notification, report submittal, and test results approval. Additionally, in accordance with 15A NCAC 02D .0605, the Permittee shall follow the procedures for obtaining any required audit sample and reporting those results.

Permit issued this the XXth of XXX, 2020.

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

William D. Willets, P.E., Chief, Permitting Section
Division of Air Quality, NCDEQ
By Authority of the Environmental Management Commission

Air Permit No. 10647R00